

Notice of Allowability

Application No.

10/047,216

Applicant(s)

TAKEDA ET AL.

Examiner

Thoi V. Duong

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed November 24, 2006.
2. ☒ The allowed claim(s) ~~is~~ are 8-12.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892) *None*
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 110606
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

1. This office action is in response to the Amendment filed November 24, 2006.

Accordingly, claim 8 was amended and claims 1-7 and 13-33 were cancelled.

Currently, claims 8-12 are pending in this application.

Allowable Subject Matter

2. Claims 8-12 are allowed.

The following is an examiner's statement of reasons for allowance: none of the prior art of record fairly suggests or shows all of the limitations as claimed.

Specifically, re claim 8, none of the prior art of record discloses, in combination with other limitations as claimed, a first orientation control element locally provided to be located on the pixel electrode near an edge of the pixel electrode on said first substrate and giving an orientation regulating force to liquid crystal molecules near the edge of said pixel electrode on said first substrate, the orientation regulating force counteracting an orientation regulating force given by the edge of said pixel electrode to said liquid crystal molecules of said liquid crystal layer, so that said liquid crystal molecules including those near said edge are oriented in a substantially the same direction, when difference in orientation direction among the liquid crystal molecules adjacent to each other near said edge is caused by the orientation regulating force given to the liquid crystal molecules of said liquid crystal layer by said edge of said pixel electrode when voltage is being applied between said pixel and opposed electrodes.

The most relevant references, US 6,567,144 B1 to Kim et al. (Kim) and US 6,424,397 B1 to Kuo, fail to disclose or suggest the first control element locally provided

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to be located on the pixel electrode near an edge of the pixel electrode on the first substrate. As shown in Fig. 8, Kim discloses a first orientation control element 171 provided on top of the pixel electrode near an edge 19 of the pixel electrode 20 on the second substrate. Meanwhile, as shown in Fig. 8D, Kuo discloses a first orientation control element 718a locally provided near an edge of the pixel 712 on the first substrate 700; however, the first orientation control element is located outside the pixel electrode instead of being located on the pixel electrode.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thoi V. Duong whose telephone number is (571) 272-2292. The examiner can normally be reached on Monday-Friday from 8:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms, can be reached at (571) 272-1787.

Thoi V. Duong



01/24/2007